INSTALLATION, OPERATION AND MAINTENANCE MANUAL

Warning

Please read carefully before proceeding with installation. Your failure to follow any attached instructions or operating parameters may lead to the product's failure and possible damage to property.

Save manual for future reference

Model: RO-PURE

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System Tested and certified by WQA against NSF/ANSI Standard 58 for the reduction of the claims specified on the performance data sheet.

Refer to enclosed warranty for operating parameters to ensure proper use with your water supply.

Watts Premier, Inc.
1725 W. Williams Drive C-20
Phoenix, AZ 85027
Phone: 800-752-5582
www.wattspremier.com
Fax: 623-931-0191

Service Record

Model Number:_____ Serial Number:_____

Date of Purchase:_____ Date of Install:_____ Installed by:_____

Date	Sediment Filter (6 months)	Carbon Pre-Filter (6 months)	Membrane (2-5 years)	Carbon Post-Filter (6 months)	

NOTES:

WARRANTY REGISTRATION

Thank you for selecting Watts Premier for your water filtration needs.

4 Ways to Register

1. On-line at www.wattspremier.com

Register your product on-line and receive a 5% discount on your next on-line order, Plus receive reduced shipping.

2. Call in your information 1-800-752-5582

Call and we will enter your information.

3. Fax in your information 623-931-0191

Fax this form directly to us.

4. Mail in the information.

Please complete the form below. Mail to: **Watts Premier**
1725 W. Williams Dr. C-20
Phoenix, AZ 85027

Registering will insure you receive Watts

FREE

Filter Reminder Service

Watts Premier Inc. is concerned for the safety of your personal information. Watts Premier collects personal information when you register with Watts Premier. This information is stored in our data base and we do not rent, sell, or share personal information with other people or nonaffiliated companies. We reserve the right to send you certain types of communications such as direct mail, email, or by telephone relating to our products or products that you have purchased. We limit access to your personal information to those employees who will directly provide you with services or products in order to do their jobs. We want to offer you four ways to communicate with us. 1.Online, 2.Fax, 3.Telephone, and 4. Mail the form below. By registering your product you will receive the full benefit of our warranty. Watts Premier will also send you a semiannual filter change reminder beginning six months from date of installation. To insure the highest quality of your water, filters should be replaced every 6 months. If you have any questions or comments please give us a call at 1-800-752-5582 M-F 8:00am -5:00pm MST.

Iowa Department of Public Health - Sales in Iowa require this to be completed, signed and returned. These signatures will be retained on file for two years.

First Name:_____ Last Name:_____

Address: _____ City: _____

State: _____ Zip Code: _____

Country: ☐ USA ☐ CANADA ☐ MEXICO ☐ OTHER _____

Phone # _____-_____ -_____ Email Address: _____

Date of Purchase: _____ Date of Install: _____

Installed By: ☐ SELF ☐ Plumbing Professional Where Purchased: _____

Model Number: _____ Serial Number: _____ - _____
XXXXX - XXXXXX

Watts Premier, Inc. 1725 W. Williams Drive C-20 Phoenix, AZ 85027
Phone: 800-752-5582 www.wattspremier.com Fax: 623-931-0191

Thank you for your purchase of a state of the art Watts Premier Reverse Osmosis (RO) water treatment system. Water quality concerns are becoming more of a focus for the public. You may have heard about contaminants in the drinking water, such as Arsenic, Perchlorate, Chromium, Cryptosporidium or Giardia. There may also be some local water issues such as high levels of Lead and Copper. This Watts Premier water treatment system has been designed and tested to provide you with high quality drinking water for years to come. The following is a brief overview of the system.

Your Reverse Osmosis System:

Osmosis is the process of water passing through a semi permeable membrane in order to balance the concentration of contaminants on each side of the membrane. A semi permeable membrane is a barrier that will pass some particles like clean drinking water, but not other particles like arsenic and lead.

Reverse osmosis uses a semi permeable membrane; however, by applying pressure across the membrane, it concentrates contaminants (like a strainer) on one side of the membrane, producing crystal clear water on the other. This is why RO systems produce both clean drinking water and rinse water that is flushed from the system. This reverse osmosis system also utilizes carbon block filtration technology, and can therefore provide a higher quality drinking water than carbon filtration systems alone.

Your system is a three or four stage RO which is based upon separate treatment segments within the one complete water filtration system. These stages are as follows:

Stage 1 (Not in three stage units) – Sediment filter, recommended change 6 months.

The first stage of your RO system is a five micron sediment filter that traps sediment and other particulate matter like dirt, silt and rust which affect the taste and appearance of your water.

Stage 2 – Carbon filter, recommended change 6 months.

The second stage contains a 5 micron carbon block filter. This helps ensure that chlorine and other materials that cause bad taste and odor are greatly reduced.

Stage 3- Membrane, recommended change 2-5 years.

Stage three is the heart of the reverse osmosis system, the RO membrane. This semi permeable membrane will effectively take out TDS, Sodium and a wide range of contaminants such as Percholate, Chromium, Arsenic, Copper, Lead as well as Cysts, such as Giardia and Cryptosporidium. Because the process of extracting this high quality drinking water takes time, your RO water treatment system is equipped with a storage tank.

Stage 4- Carbon post filter, recommend change 6 - 12 months.

The final stage is a high quality carbon filter. Drinking water enters this filter after the water storage tank and it is used as a final polishing filter.

Note: Filter life may vary based upon local water conditions or use patterns.

System Maintenance

Just because you can not taste it, does not mean that it is not there. Contaminants such as Lead, Chromium and Arsenic are undetectable to the taste. Additionally, over time if you do not replace the filter elements, other bad tastes and odors will be apparent in your drinking water.

This is why it is important to change out your filters at the recommended intervals as indicated in this system manual. When replacing the filter elements, pay special attention to any cleaning instructions. Should you have any further questions please refer to our website at www.wattspremier.com or call our customer service dept. at **1-800-752-5582.**

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Thank you for your purchase of a Watts Premier Reverse Osmosis system. With proper installation and maintenance, this system will provide you with high quality water for years to come. All of Premier's water enhancement products are rigorously tested by independent laboratories for safety and reliability. If you have any questions or concerns, please contact our customer service department at 1-800-752-5582 (outside USA 623-931-1977) or refer to our on-line troubleshooting at www.wattspremier.com.

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Operational Parameters

Installation needs to comply with state and local plumbing regulations. This system is intended to be installed on the cold water line only.

Operating Temperatures:	Maximum 100°F (37.8°C)	Minimum 40°F 4.4°C)
Operating Pressure:	Maximum 85 psi (7.43 g/cm2)	Minimum 40 psi (2.80 kg/cm2)
pH Parameters:	Maximum 11	Minimum 2
Iron:	Maximum 0.2 ppm	
TDS (Total Dissolved Solids):	< 1800 ppm	
Turbidity:	< 5NTU	

Hardness: Recommended hardness not to exceed 10 grains per gallon, or 170ppm. System will operate with hardness over 10 grains but the membrane life may be shortened. Addition of a water softener may lengthen the membrane life.

Note: The operating pressure in your home should be tested over a 24 hour period to attain the maximum pressure. If operating pressure is above 85 psi a pressure regulator is recommended. If it is above 100 psi then a pressure regulator is required (see part number 107001 on page 20).

Note: Reverse Osmosis water should not be run through copper tubing as the purity of the water will leach copper causing an objectional taste in water and pin holes to form in tubing. Watts supplies speciality filters (part number 107008) that can be used if copper tubing follows the Reverse Osmosis unit. Be sure to follow any state or local regulations during installation.

Contents of Reverse Osmosis (RO) System

Note: A 4 Stage RO System has 4 quick change cartridges and a 3 Stage RO System has 3 quick change cartridges.

1 Tank
1 RO Module (complete with filters)
1 Parts Bag
1 Faucet Bag
1 Manual with Warranty Card

If any of the items are missing please contact Premier prior to installing.

Tools Recommended For Installation

√ 1 1/4" Hole Saw Bit for Faucet opening
√ Round Knock out Punch for Stainless Sinks 1 ¼”
√ Adjustable Wrench
√ Sharp Knife
√ 1 / 2" Open End Wrench
√ Phillips Screw Driver
√ Needle Nose Pliers – Adjustable Pliers
√ Electric Drill
√ 1/8", 1/4" & 3/8" Drill Bits

Note: Most sinks are predrilled with 1 ½" or 1 ¼" diameter hole that you can use for your RO faucet (If you are already using it for a sprayer or soap dispenser, you will need an additional hole for the faucet).

Drill a Hole for the Faucet in a Porcelain Sink

Porcelain sinks are extremely hard and can crack or chip easily. Use extreme caution when drilling. Premier accepts no responsibility for damage resulting from the installation of faucet.

Step 1 Determine desired location for the faucet on your sink and place a piece of masking tape on location where the hole is to be drilled. Mark the center of the hole on the tape.

Step 2 Using a variable speed drill on the slowest speed, drill a $^{1}/_{8}$" Pilot hole through both porcelain and metal casing of sink at the center of the desired location. (If drill bit gets hot it may cause the porcelain to crack or chip).

Step 3 Using a 1 ¼" hole saw, proceed to drill the large hole. Keep drill speed on the slowest speed and use lubricating oil or liquid soap to keep the hole saw cool during cutting.

Step 4 Make sure the surroundings of the sink are cooled before mounting the faucet to the sink after drilling. Remove all sharp edges with a file.

Punch a Hole for the Faucet in a Stainless Steel Sink

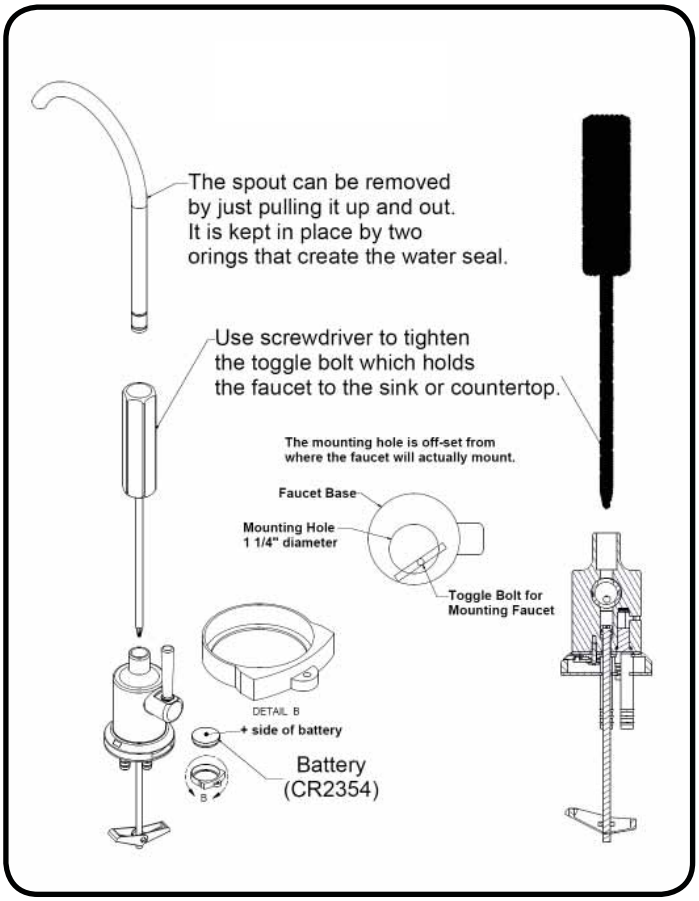
Note: If mounting faucet to a Stainless Steel Sink you will need a 1 ¼" hole punch. The faucet opening should be centered between the back splash and the edge of the sink, ideally on the same side as the vertical drain pipe.

Step 5 Drill a ¼" pilot hole. Use the appropriate sized hole punch and an adjustable wrench to punch the hole in the sink.

Once the hole is punched out, the faucet can be installed.

WATTS **Premier Chrome Monitored & Non-Monitored (Top Mount) Faucet Installation**

	Minimum	Maximum
Mounting Hole Size	1.00”	1.25”
Torque on Toggle Bolt	5lb.in. (max)	


The spout can be removed by just pulling it up and out. It is kept in place by two orings that create the water seal.
Use screwdriver to tighten the toggle bolt which holds the faucet to the sink or countertop.
The mounting hole is off-set from where the faucet will actually mount.
Faucet Base
Mounting Hole 1 1/4" diameter
Toggle Bolt for Mounting Faucet
DETAIL B
+ side of battery
Battery (CR2354)

Gather and identify the faucet pieces.

Step 6 Remove faucet base & faucet spout from their respective plastic bags. From above the sink, feed the faucet base, tubing & toggle bolt down through the 1¼” mounting hole in the sink. Align the faucet base so that the handle is on the right side and the base is sitting flush on the sink top. Ensure that the soft rubber gasket is uniformly positioned in between the base and the top of the sink.

Step 7 Lift faucet base and remove the white paper from the gasket and stick it to the top of the sink in the appropriate position for the faucet base. Turn the handle down (towards you) to the “ON” position to reveal the tightening screw (located where the spout will be inserted). Using a phillips head screwdriver, turn the screw clockwise until the toggle bolt secures the faucet base snug onto the sink top, do not over torque toggle bolt (5lb.in. max)

Step 8 Once the faucet base is securely fastened to the sink top, insert the faucet spout into the faucet base until it is fully seated. Turn the handle up (vertical) to the “OFF” position.

Step 9 Completion of faucet installation (tubing connections) will be done later in this manual. Refer to the ***Black Tube Connection (page 12), Red Tube Connection (page 13), and Blue Tube Connection (page 12)*** sections of this manual.

If your faucet is equipped with the monitoring function please proceed to the next step, otherwise please proceed to the next page.

Faucet Battery Installation

Step 10 Insert the battery drawer with the battery into the base of the faucet until it is flush.

NOTE: The + side of the battery faces up. The compartment drawer will not slide in if the battery is installed upside down.

When the battery is first installed, both the red and green lights will flash to indicate that both lights are functional. Thereafter, it will flash green only when the faucet handle is turned to the “ON” position. When your system is ready to be serviced (approximately six months) you will see the light flash red when the handle is turned to the “ON” position. Refer to the ***Six Month Maintenance (page 14)*** section of this manual for filter replacement.

NOTE: If your water usage is high the red light may activate sooner than six months indicating the need for filter replacement.

This faucet provides an electronic monitor that will tell you when it is time to replace the filters in your water treatment device. The light indicator will be green for the life of the filter, turning red once the life of the filter has been reached. This can occur after six months of use, or sooner for heavy water usage. To reset the electronic monitor during replacement of filters, simply slide out the battery from the faucet and reinsert. The battery life is expected to last one year, however, for heavy use the battery may need to be replaced sooner. For replacement, look for battery number CR2354 (Watts p/n:116082) which is available at your local battery store or contact Watts Premier at 800-752-5582. You can also order online at www.wattspremier.com.

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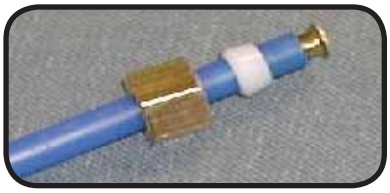
Green Tube Connection (From RO Module to The Adapta Valve)



Step 11 Remove a brass nut, plastic sleeve and brass insert from the parts bag. Place nut on the green tube (coming from the RO Module) first, then the plastic sleeve (small taper end of plastic sleeve must point to the end of tube) and then insert the brass insert into the end of the tube.

Step 12 Insert the green tube into the ¼" opening on the Adapta Valve (supplied in the parts bag) until it stops. Slide nut and sleeve down and thread onto the male pipe threads. Use a ½" wrench to securely tighten.

Adapta Valve - Part# 134007

Adapta Valve Installation - Part# 134007

Configuration for 3/8" compression fittings

Hot Supply Cold Supply

Configuration for 1/2" compression fittings

Step 13 The green tubing may be removed from the quick connect fitting on the RO Module to ease with the installation of the Adapta Valve to the supply line (see page 11 for quick connect fitting use directions). Make sure to re-attach the green tube to the RO Module after the Adapta Valve has been installed.

Step 14 Turn off the cold water supply to the faucet by turning the angle stop valve completely off.

Step 15 Attach adapta valve as illustrated in the photos above, choosing the configuration that fits your plumbing. (When attaching the adapta valve to straight pipe threads, use teflon tape on the treads.)

Caution: Water supply line to the system must be from the cold water supply line only. Hot water will severely damage your system.

Note: If the green tubing was removed from the quick connect fitting on the RO Module in Step 13, re-attach it to the RO Module now (see page 11 for quick connect fitting use directions).

Reverse Osmosis Module Mounting

Step 16 Determine best location for the RO module to be mounted to allow for future system maintenance. The parts bag has 2 self tapping screws. Using a phillips screwdriver, screw them into the cabinet wall using the mounting bracket as a guide.

Note: ***Do not cut any RO system tubes at this time***

Drain Saddle Installation - Part# 164016

Drain Saddle fits standard 1 ¼" – 1 ½" drain pipes

Caution: If you have a garbage disposal, do not install the drain line near it. Installation of the drain line must be either above the disposal, or if a second sink drain is available, install it above the cross bar on the second sink. Installation of the drain line near a garbage disposal may cause the drain line to plug. If no other installation of drain line is available, Watts offers drain line installation kits that can be used with garbage disposals (part numbers 164014 and 164020).

Step 17 Gather the pieces of the drain saddle

1 Black compression nut	1 Semicircle bracket with opening
2 Screws	1 Foam washer
2 Nuts for screws	1 Semicircle bracket

Step 18 The small square black foam gasket with a circle cut out of the middle must be applied to the inside of the drain saddle. Remove sticky tape backing and stick to the drain saddle as shown.

Step 19 Assemble the drain saddle around the drain pipe at least 1 ½" above the nut of the P-trap to allow for the removal of the P-trap if necessary. Using a Philips screw driver tighten screws evenly and securely on both sides of the drain saddle.

Insert a ¼" drill bit into the opening of the drain saddle and drill a hole in to the drain pipe. **NOTE: Take extreme caution to only drill through one side of the drain pipe and not all the way through.**

Attach black compression nut to the drain saddle, but do not tighten at this time. The black tubing will be installed later.

Caution: Do not over-tighten the screws. Over-tightening screws may crack the drain saddle.

Tank Ball Valve Installation - Part#: 134018

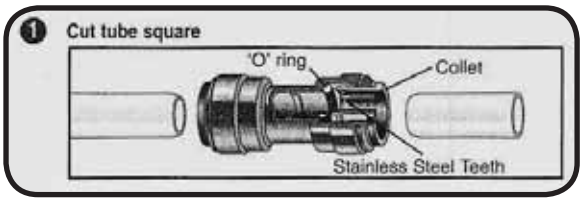
Step 20 Teflon tape must be applied in a clockwise direction. Wrap (7 to 12 turns) around the male pipe threads (MPT) on the stainless steel fitting on top of the tank.

Step 21 Thread the quick connect ball valve (supplied in the parts bag) onto the stainless steel connector on the tank.
Note: Do not over-tighten plastic connections.

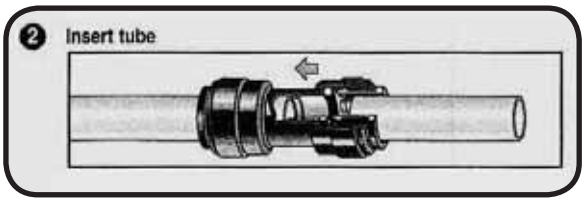
How To Use the Quick Connect Fittings For Tubing Connections

To make a connection, the tube is simply pushed into the fitting. Place a piece of tape 1/2” from end of tube to indicate how far the tube should be inserted. The unique patented locking system holds the tube firmly in place without deforming it or restricting flow.

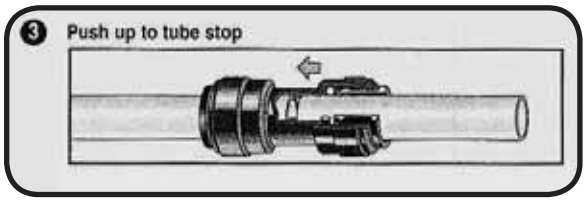
NOTE: These diagrams are just to show how the quick connect fittings work, your product may not have this exact connector part.



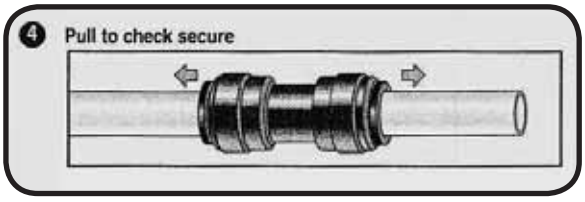
It is essential that the outside diameter be free of score marks and that burrs and sharp edges be removed before inserting into fitting.



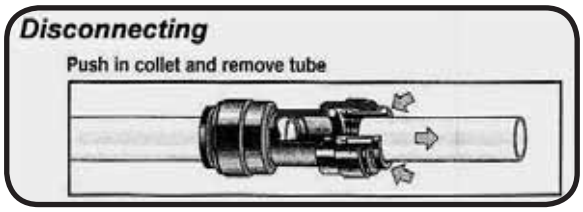
Fitting grips before it seals. Ensure tube is pushed into the tube stop.



Push the tube into the fitting, to the tube stop. The collet (gripper) has stainless steel teeth which hold the tube firmly in position while the O-ring provides a permanent leak proof seal.



Pull on the tube to check that it is secure. It is a good practice to test the system prior to leaving site and /or before use.



To disconnect, ensure the system is depressurized before removing the tube. Push in collect squarely against face of fitting. With the collet held in this position, the tube can be removed. The fitting can then be reused.

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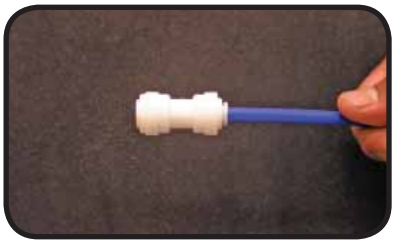
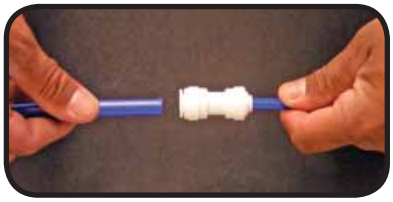
Blue Tube Connection (From The RO Module To TANK)

Step 22 Position tank in desired location. Stand it upright or lay it on its side (using the black plastic stand). Measure the blue tube (marked “TANK”) from the RO module over to the tank and cut it to length leaving a straight edge on the end of the tube. Then insert the tube into the quick connect fitting on the tank ball valve. Make sure the tube is pushed in all the way to the tube stop (see page 11 for quick connect fitting use directions).

Blue Tube Connection (From The RO Module To FAUCET)



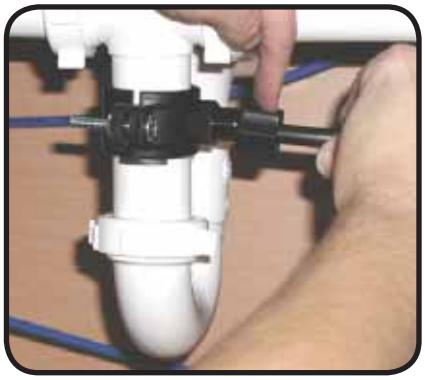
Step 23 Determine where the 3/8” blue tubing from the faucet and the 1/4” blue tubing (marked “FAUCET”) from the RO Module would join together comfortably. Cut the tubes leaving a straight cut on both tubes. Insert the 1/4” blue tube (marked “FAUCET”) from the RO module into the 1/4” end of the 1/4” x 3/8” quick connect union supplied in the parts bag. Make sure the tube is pushed in all the way to the tube stop.



Step 24 Insert the 3/8” blue tube from the faucet into the remaining 3/8” open end of the 1/4” x 3/8” quick connect union. Make sure the tube is pushed in all the way to the tube stop.

Black 3/8” Tube Connection (From FAUCET To The DRAIN SADDLE)

Note: The tubing must be as SHORT and STRAIGHT as possible, making a downward slope from faucet to drain saddle to allow for proper drainage.

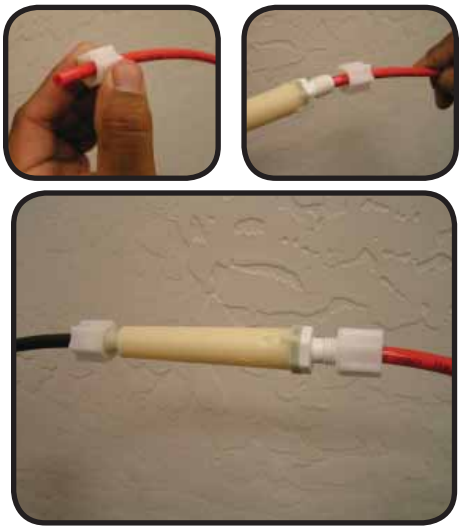


Step 25 Measure the 3/8” black tube from faucet to the black drain saddle so that it is as short and straight as possible, then make a straight cut through tube.

Step 26 Remove black plastic nut from drain saddle. Slip black tube through black nut. Insert black tube into the opening in the drain saddle and tighten the black nut securely.

Note: This is a gravity fed line, if there is any dip or kink in the tube the rinse water will not flow into the drain properly. Water will back up and come out the air gap hole in the back of the faucet base.

Red Tube Connection (From FAUCET To The FLOW RESTRICTOR)



Step 27 Determine where the 1/4” red tubing from the faucet and the open end of the flow restrictor (attached to the end of the 1/4” black tubing from the RO Module) would join together comfortably. Cut the tubes to length, making sure the cut ends are straight. Unscrew the supplied compression nut from the open end of the flow restrictor and push the nut onto the end of the red tube. Insert the red tube (with attached nut) into the open end of the flow restrictor making sure the tube is pushed in all the way to the tube stop. Once the red tube is fully inserted, securely tighten the compression nut onto the flow restrictor.

Start up Instructions

Step 1 Turn on the incoming cold water. Open the Adapta-Valve installed earlier in this manual (page 9). Check the system for leaks and tighten any fitting as necessary. (Check over the next 24 hours to ensure no leaks are present).

Step 2 Open the RO faucet and leave it open until water begins to trickle out. (it will come out slowly and may sputter at first. The water may look dark, which is carbon from the final filter. This is normal and will go away). Once the water begins to trickle out, close the RO faucet.

Step 3 The tank will take between 4 to 6 hours to fill completely (depending on the size of the membrane, local water temperature and pressure). After the tank has filled, open the RO Faucet to flush the tank completely to remove carbon particles from final filter. Repeat this step two more times. The fourth tank can be used for drinking. Note: The flushing of the tank 3 times is only necessary during initial installation. This should take about a day to complete.

Step 4 An optional ice maker kit (not included) may be purchased from Watts Premier by calling 1-800-752-5582 or buy on-line at www.wattspremier.com. If system is connected to an ice maker, turn the ice maker off (or do not allow water to flow to the ice maker) until Step 3 flushing is complete and the tank has been allowed to completely fill. Connection from the RO to the ice maker system should have an in-line valve installed before the ice maker so it can easily be closed to prevent water flowing to the ice maker during start up and periodic maintenance. Your RO tank must be allowed to fill up in order for the ice maker system to work properly. (If you are installing an ice maker kit from Watts, tee off after the final filter).

Step 5 Complete the warranty registration (page 3) and submit to Watts Premier. Premier uses this information to provide the latest information about water quality concerns as well as a free filter change reminder service. Inspect the reverse osmosis system periodically to ensure the unit is functioning properly.

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This reverse osmosis system contains a replaceable component (the RO membrane) which is critical to the efficiency of the system. Replacement of this reverse osmosis membrane should be with one of identical specifications as defined by Watts Premier to assure the same efficiency and contaminant reduction performance.

6 Month System Maintenance

Watts Premier sells a filter change kit which includes all replacement filters needed. Call 1-800-752-5582 or buy on-line at www.wattspremier.com.

Items needed:

√ One sediment filter (RED Label - 4 Stage Only P/N: 105311)
√ One carbon pre-filter (YELLOW Label P/N: 105351)
√ One carbon post-filter (BLUE Label P/N: 105341)
√ Towel to catch water from filter housings.

NOTE: Your RO module is equipped with valved heads which will automatically turn off the water supply to each filter when the filter is released, thus you do not need to turn off the incoming water supply at the Adapta-Valve. The faucet must be off when filters are replaced.

Step 1 Place the towel under the RO module to catch any excess water that drips out from the filters during the changeover.

Step 2 To make the removal of the filter housings easier, the heads & housings may be lifted up to 90 degrees as shown in the pictures to the right. Starting with the sediment filter (RED Label) push & hold the button on the valved head and pull downward (from the head) to remove the filter housing. Release button and discard old filter housing.

Step 3 Make sure to remove the cap off of the new replacement filter. Insert the new filter housing into the valved head until you hear an audible “click” (the button does not need to be pressed to install new filters).

Step 4 Repeat this procedure for the 2nd and 4th housings. When finished flush your tank completely once to remove any natural carbon fines from the RO system. Check over the next 24 hours to ensure no leaks are present.

Membrane Replacement (GREEN Label P/N: 105331)

Membranes have a life expectancy of between 2 and 5 years, depending on the incoming water conditions and the amount of use of the RO system.

Normally, a membrane would be replaced during a semiannual or annual filter change. However, if at any time you notice a reduction in water production or an unpleasant taste in the reverse osmosis water, it could be time to replace the membrane. A water sample may be sent into Premier for a free test or a TDS (total dissolved solids) monitor can be purchased from Watts Premier to test the incoming and reverse osmosis water. Membranes should be replaced when TDS reduction is 80% or less. TDS Monitors are available for purchase on page 20 of this manual.

To send a water sample, include ½ cup of tap water and ½ cup of the system’s reverse osmosis water in clean containers. Clearly mark each container. Watts Premier will test the water and call or mail you the results.

Step 1 To change your membrane follow the instructions for the 6 Month System Maintenance (previous section). The procedure to remove and change the membrane housing is the same as all the other filter housings on the RO module.

Step 2 Check over the next 24 hours to ensure no leaks are present.

Check Air Pressure in the Tank

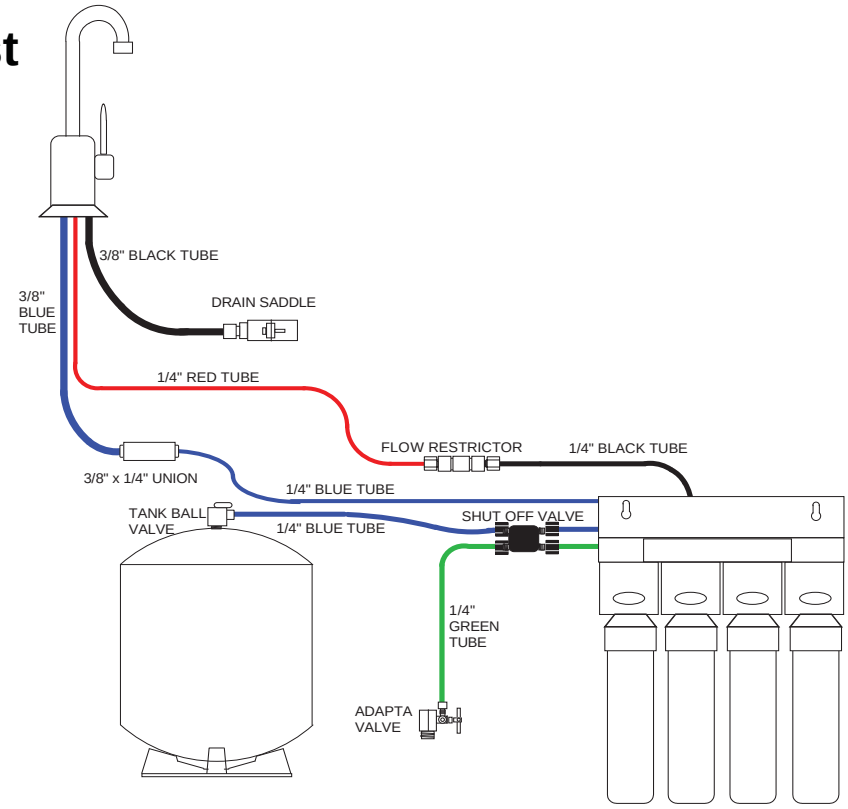
Note: Check air pressure only when tank is empty of water!

Check air pressure in the tank when you notice a decrease in available water from the RO system.

Step 1 It is recommended that you drain the tank of water, and then pump up the RO tank in order to ensure all water is out of the tank. Air can be added with a bicycle pump using the schrader valve that is located on the bottom side of the tank.

Step 2 Once all water in the tank is purged out, check air pressure of the tank. If you added too much air to the tank and it is higher than 5 - 7 psi, allow air out until you have 5 - 7 psi in the tank.

Parts List



* The reverse osmosis system contains a replaceable treatment component, critical for the effective reduction of total dissolved solids and that the product water shall be tested periodically to verify that the system is performing properly

Item #	Part #	Description
1	531150	RO4-PNP-11-50 (Head & 4 Filter Cartridges)
2	125089	FITTING-ELBOW-90-QC-1/4TX1/4I
3	622036	FLOW RESTRICT-550-STAND ALONE
4	134003	VALVE-SHUT OFF 1/4” Q.C. (RES)
5	119007	TANK-3 GALLON-METAL-WHITE
7	134007	ADAPTA VALVE
8	116074	FAUCET-AG-WATTS-CHROME-MONITOR
9	134018	VALVE-BALL-ELB-1/4QCX1/4F

Item #	Part #	Description
10	125037	FITTING-UNION-1/4”T X 3/8”T-DM
11	164016	DRAIN SADDLE 3/8”
12	119028	TANK STAND
13	610109	GREEN TUBING
14	610113	BLACK TUBING
15	610117	BLUE TUBING

TROUBLE SHOOTING

Problem	Cause	Solution
1. Low/Slow Production	Low Water Pressure	Assure a minimum of 40 psi incoming water pressure. Premier sells a booster pump if home water pressure is low. Maker sure water supply is turned on and Adapta Valve is all the way open
	Crimps in tubing	Check tubing and straighten or replace as necessary.
	Clogged pre-filters	Replace pre-filters.
	Fouled membrane	Replace membrane and flow restrictor.
2. Milky colored Water	Air in system	Air in the system is a normal occurrence with initial start up of the RO system. This milky look will disappear during normal use within 1-2 weeks. If condition reoccurs after filter change, drain tank 1 to 2 times.
3. Water constantly running unit will not shut off	Low water pressure	See #1 Above
	Crimp in supply tube	Check tubing and straighten or repair as necessary
4. Noise / Water from faucet vent hole or noise from drain	Crimp or restriction in drain line	Check tubing and straighten or repair as necessary. Straighten all drain lines. Clear blockage. Cut off any Excess tubing
	Drain tube clogged	Caused from dishwasher or garbage disposal. Disconnect the 3/8" black line at the drain, clean the 3/8" black line out with a wire, then reconnect. Blowing air through the line will not always remove the clog.
5. Small amount of water in storage tank	System starting up	Normally it takes 6-10 hours to fill tank. Note: low incoming water pressure and/or temperature can drastically reduce production rate.
	Low water pressure	See #1 above.
	To much air in tank	Tank air pressure should be 5 psi when empty of water. If below 5 psi add air or bleed if above 5 psi. Check only when tank is empty of water.
6. Water leaks from the filter / membrane housing	Not properly inserted	See previous page. Re-insert the filter / membrane housing.
7. Low water flow from faucet	Check air in tank	Use a Digital Air Gauge for best results. The empty tank pressure should be 5-7 psi. To reset the air pressure in the tank turn off water supply and drain tank by opening faucet. When water stops flowing out of the faucet. Remove schrader valve cover pump air into tank until water stops flowing from the faucet. Release the air out of the schrader valve until you reach 5-7 psi. Replace schrader valve cover. Turn on Water.

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Watts Premier Inc.
1725 W. Williams Drive C-20
Phoenix, AZ 85027 USA
California Certification # 07-1882
RO-Pure
System conforms to NSF Standard 58 for specific claims.

GENERAL USE CONDITIONS:

1. System to be used with municipal or well water sources treated and tested on regular basis to insure bacteriological safe quality. DO NOT use with water that is microbiologically unsafe or unknown quality without adequate disinfection before and after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.
2. This system is acceptable for treatment of influent concentrations of no more than 27 mg/L nitrate and 3 mg/L nitrite in combination measured as N and is certified for nitrite/nitrate reduction only for water supplies with a pressure of 280 kPa (40 psig) or greater. If your water supply is under 40 psi Watts Premier recomends the use of a RO booster pump for proper operation.
3. Operating Temperature: Maximum: 100°F (40.5°C) Minimum: 40° (4.4°)
4. Operating Water Pressure: Maximum: 85 psi (6.0kg/cm2) Minimum: 40 psi (2.8kg/cm2)
5. pH 2 to 11
6. No iron present in incoming feed water supply.
7. Hardness of more than 10 grains per gallon (170 ppm) may reduce RO membrane life expectancy.
8. Recommend TDS (Total Dissolved Solids) not to exceed 1800 ppm.

RECOMMENDED REPLACEMENT PARTS AND CHANGE INTERVALS:
Note: Depending on incoming feed water conditions replacement time frame may vary.

Description		Change time Frame	Cost
Sediment Pre-filter:	#105311	6 Months	$12.50
Carbon Pre-filter:	#105351	6 Months	$19.30
Final Carbon filter	#105361	12 Months	$19.30
R.O. Membrane:	#105331	2 to 5 years	$72.95

This system has been tested according to NSF/ANSI 58 for reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system as specified in NSF/ANSI 58. This system has been tested for the treatment of water containing pentavalent arsenic (also known as As (V), As (+5), or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not remove other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic, Please see the Arsenic Facts section of the Performance Data Sheet for further information.

	Avg. In. (mg/L)	Avg. Eff. (mg/L)	% Reduction	pH	Pressure	Max Eff. mg/L	Inf. challenge concentration mg/L	Max Allowable concentration mg/L
Arsenic (Pentavalent)	.310	0.001	99.6%	7.24	50psi	0.002	0.30±10%	0.010 mg/L
Barium Reduction	9.2	0.08	99.0%	7.64	50psi	0.12	10.0±10%	2.0
Cadmium Reduction	0.031	0.0004	98.0%	7.49	50psi	0.0008	0.03±10%	0005
Chromium (Hexavalent)	0.30	0.002	99.0%	7.24	50psi	0.004	0.03±10%	0.1
Chromium (Trivalent)	0.30	0.001	99.0%	7.64	50psi	0.002	0.03±10%	0.1
Copper Reduction	3.2	0.02	99.0%	7.40	50psi	0.04	3.0±10%	1.3
Cysts	92,000#/ml	3 #/ml	99.99%	7.44	50psi	18	minimum 50,000/mL	N/A
Fluoride Reduction	8.7	0.19	97.0%	7.24	50psi	0.3	8.0±10%	1.5
Lead Reduction	0.15	0.002	98.8%	7.39	50psi	0.005	0.15±10%	0.0107
Nitrate	27	3.8	86.0%	7.24	50psi	4.3	27.0 ±10%	10.0
Nitrite	3.1	0.41	86.0%	7.24	50psi	0.46	3.0 ±10%	1.0
Nitrate + Nitrite	30	4.2	86.0%	7.24	50psi	4.8	30.0 ±10%	10.0
Perchlorate	0.14	0.003	97.0%	7.39	50psi	0.005 mg/L	0.10±10%	0.006
Radium 226/228	25pCi/L	5pCi/L	80.0%	7.24	50psi	5pCi/L	25pCiL±10%	5pCiL
Selenium	94.85	<0.2	97.0%	7.24	50psi	<0.2	0.10±10%	0.05
TDS	741	22	97.0%	7.28	50psi	26.0	750±40mg/L	187

Recovery - 15.77% Daily Production Rate - 18.43 GPD Efficiency - 8.82%

Depending on water chemistry, water temperature, and water pressure Watts Premier's R.O. Systems production and performance will vary. Efficiency rating means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage. Recovery rating means the percentage of the influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed. There is an average of 4 gallons of reject water for every 1 gallon of product water produced.
REFER TO OWNER'S INSTALLATION/SERVICE MANUAL FOR FURTHER MAINTENANCE REQUIREMENTS AND WARRANTY INFORMATION.

Phone: (623) 931-1977 Fax: (623) 931-0191 Email: wpmail@watts.com

Arsenic Fact Sheet

Arsenic (As) is a naturally occurring contaminant found in many ground waters. Arsenic in water has no color, taste or odor. It must be measured by an arsenic test kit or lab test.

Public water utilities must have their water tested for arsenic. You can obtain the results from your water utility contained with in your consumer confidence report. If you have your own well, you will need to have the water evaluated. The local health department or the state environmental health agency can provide a list of test kits or certified labs.

There are two forms of arsenic: pentavalent arsenic (also called As (V), As (+5)) and trivalent arsenic (also called As (III), As (+3)). In well water, arsenic may be pentavalent, trivalent, or a combination of both. Although both forms of arsenic are potentially hazardous to your health, trivalent arsenic is considered more harmful than pentavalent arsenic.

RO systems are very effective at removing pentavalent arsenic. A free chlorine residual will rapidly convert trivalent arsenic to pentavalent arsenic. Other water treatment chemicals such as ozone and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A combined chlorine residual (also called chloramine) where it does convert trivalent arsenic to pentavalent arsenic, may not convert all the trivalent arsenic in to pentavalent arsenic. If you get your water from a public water utility, contact the utility to find out if free chlorine or combined chlorine is used in the water system.

This Watts Premier reverse osmosis system is designed to remove up to 98% of pentavalent arsenic. It will not convert trivalent arsenic to pentavalent arsenic. Under laboratory standard testing conditions, this system reduced 0.30 mg/L (ppm) pentavalent arsenic to under 0.010 mg/L (ppm) (the USEPA standard for drinking water). Actual performance of the system may vary depending on specific water quality conditions at the consumer's installation. In addition to the independent laboratory standard testing conditions Watts Premier has conducted additional field testing on our reverse osmosis units to determine trivalent arsenic reduction capabilities. Based upon Watts Premier field testing, it has been determined that the RO units are capable of reducing up to 67% of trivalent arsenic from the drinking water.

The RO membrane component of this Watts Premier reverse osmosis system must be maintained according to its recommended maintenance cycle. Specific component identification and ordering information can be found in the installation/operation manual maintenance section, by phone at 1-800-752-5581 or online www.wattspremier.com

California Proposition 65 Warning
WARNING: this product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (Installer: California law requires that this warning be given to the consumer). For more information: www.watts.com/prop65.

Other Products from Watts Premier

Watts Premier has other fine water filtration products and accessories to enhance your water and to compliment your existing RO System. Listed on the next several pages are only a few of the items we offer. Visit our website at www.wattspremier.com or call our Customer Service Representatives at 1-800-752-5582 (inside USA) 1-623-931-1977 (outside USA) for more products.

Watts Premier sells a filter change kit which includes all replacement filters needed.
Call 1-800-752-5582 or buy on-line at www.wattspremier.com.

Top Mount Faucets by Watts Premier
These attractively designed faucets feature a long reach spout to compliment all styles of kitchen decor. The unique top mount design allows for easy above counter installation. The Monitored version of this faucet has an LED light that turns red to notify you for filter replacement.

Part No. 116000 - Chrome (Non-Monitored)
116072 - Brushed Nickel (Non-Monitored)
116074 - Chrome (Monitored)

Watts Premier Hot Water Recirculation Pump
Bring convenience and saving to your home, giving you hot water instantly at every faucet, when you need it. This unique product is easy to install and not only provides you with the convenience of hot water when you need it, but saves an average of over 11,000 gallons per year.

Part No. 500800

3/8" Ice Maker Kit for RO and Filtration

3/8 inch connection includes 30 feet tubing, ball valve, and fittings.

Part No. 500102

Watts Premier Ice Maker Kit - High efficiency replaceable filter that can last up to 5 years or 20,000 gallons. Prefect for residential and commercial ice makers as well as refrigerators, drinking fountains, coffee & tea brewers, motor homes and campers. Reduces chlorine taste and odor.

Part No. 500327

Whole House Filter
Great for sediment problems such as in well water supply or areas where dirt and rust particles are a problem. Includes three 50 Micron sediment filters, and wrench. (3/4" ports).
Part No. 500223

Replacement filter
Part No. 304007

Water Pressure Gauge
This gauge mounts onto your outside hose connection to accurately show your home's water pressure up to 300 psi. A red needle shows peak overnight pressure, which may exceed readings during the day. High pressure readings may indicate the need for pressure regulator to prevent damage to appliances.
Part No. 261003

Pocket Total Dissolved Solids (TDS) Monitor
Test water electronically to verify reverse osmosis membrane effectiveness. Carrying case included.

Part No. 273001

Whole House High Performance Water Pressure Regulator
Provides water pressure control solutions for residential, commercial, and industrial applications. Offers durability and years of continuous trouble free operation.

Part No. 107001
**** All prices subject to change.***

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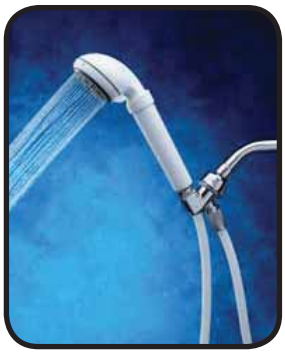
Removing chlorine from your shower

Special Chlorgon & KDF media – More effective then carbon medias with hot water applications in the removal of the following.

- √ Free Chlorine (CL-)
- √ Combined Chlorine (Sodium Hypochlorite)
- √ Hydrogen Sulfide (Rotten egg smell)
- √ Plus, its pH balanced.
- √ Iron oxide (rust water)
- √ Dirt, sediment
- √ Odors



Deluxe Shower Handle with Built in Filter 2PK

5-Way Massaging Spray
72” Reinforced Hose
High Strength Bracket
Triple Plated Finish
Reversible Filter Cartridge (Model HHC)
Cartridge Life Rating: 3 months

Part No. 107090 WHITE *$42 .95
Part No. 107091 CHROME *$44.95

Replacement filters

Part No. 107075

Shower Falls Deluxe Shower Handle with Built in Filter

Curved Ergonomic Shower Handle
Filter Handle Extension
Dual Swivel Adjustment
Ultra Deluxe 5 Way Massaging Spray
72” Reinforced Hose
Chrome Plated Brass Bracket & Swivel Ball Extension
Triple Plated Finish
Reversible Filter Cartridge (Model HHC)
Cartridge Life Rating: 3 months

Part No. 107095 CHROME *$55.95

Replacement filters 2PK

Part No. 107075

All-In-One reversible High-Flow Filter
Deluxe 5-Way Massaging Spray

Soft-Touch Adjustment Pads
Anti-Scaling Spray Nozzle
High Strength Housing
Triple Plated Finish
Cartridge Life Rating: 6 months

Part No. 107098 White/Chrome *$47.50
Part No. 107099 White/Gold *$45.00

Replacement filter

Part No. 107080

***All prices subject to change.**

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Limited Warranty

What your Warranty Covers:
If any part of your WATTS PREMIER Reverse Osmosis System is defective in workmanship (excluding replaceable filters and membranes), return unit after obtaining a return authorization (see below), less tank, within 3 years of original retail purchase, WATTS PREMIER will repair or, at WATTS PREMIER'S option, replace the system at no charge.

How to obtain Warranty Service:
For warranty service, call 1-800-752-5582 for documentation and a return authorization number. Once the return authorization number has been created, ship your Reverse Osmosis unit (less tank) to our factory, freight and insurance prepaid, with proof of date of original purchase. Include a note stating the problem experienced and include your name, address and your return authorization number. No returns will be accepted with out the proper return authorization number. Premier will repair it, or replace it, and ship it back to you prepaid.

What this warranty does not cover:
This warranty does not cover defects resulting from improper installation, (contrary to WATTS PREMIER's printed instructions), from abuse, misuse, misapplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, freezing, environmental factors, water pressure spikes or other such acts of God.

This warranty will be void if defects occur due to failure to observe the following conditions:

1. The Reverse Osmosis System must be hooked up to a potable municipal or well cold water supply.
2. The hardness of the water should not exceed 10 grains per gallon, or 170 ppm.
3. Maximum incoming iron must be less than 0.2 ppm.
4. The pH of the water must not be lower than 2 or higher than 11.
5. The incoming water pressure must be between 40 and 85 pounds per square inch.
6. Incoming water to the RO cannot exceed 105 degrees F (40 degrees C.)
7. Incoming TDS/Total Dissolved Solids not to exceed 1800 ppm.
8. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

This warranty does not cover any equipment that is relocated from the site of its original installation.

This warranty does not cover any equipment that is installed or used outside the United States of America and Canada.

LIMITATIONS AND EXCLUSIONS:

WATTS PREMIER WILL NOT BE RESPONSIBLE FOR ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. PREMIER WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING TRAVEL EXPENSE, TELEPHONE CHARGES, LOSS OF REVENUE, LOSS OF TIME, INCONVENIENCE, LOSS OF USE OF THE EQUIPMENT, AND DAMAGE CAUSED BY THIS EQUIPMENT AND ITS FAILURE TO FUNCTION PROPERLY. THIS WARRANTY SETS FORTH ALL OF PREMIER'S RESPONSIBILITIES REGARDING THIS EQUIPMENT.

OTHER CONDITIONS:

If PREMIER chooses to replace the equipment, WATTS PREMIER may replace it with reconditioned equipment. Parts used in repairing or replacing the equipment will be warranted for 90 days from the date the equipment is returned to you or for the remainder of the original warranty period, whichever is longer. This warranty is not assignable or transferable.

YOUR RIGHTS UNDER STATE LAW:
Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply. This warranty gives you specific legal rights, and you may have other legal rights which vary from state to state.